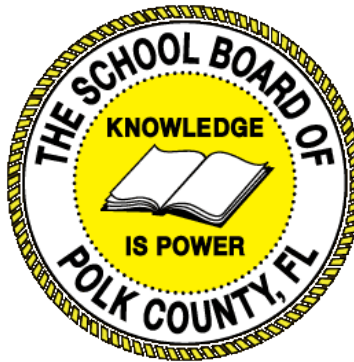


Individual Test Item Specifications

8209540- Digital Design 4

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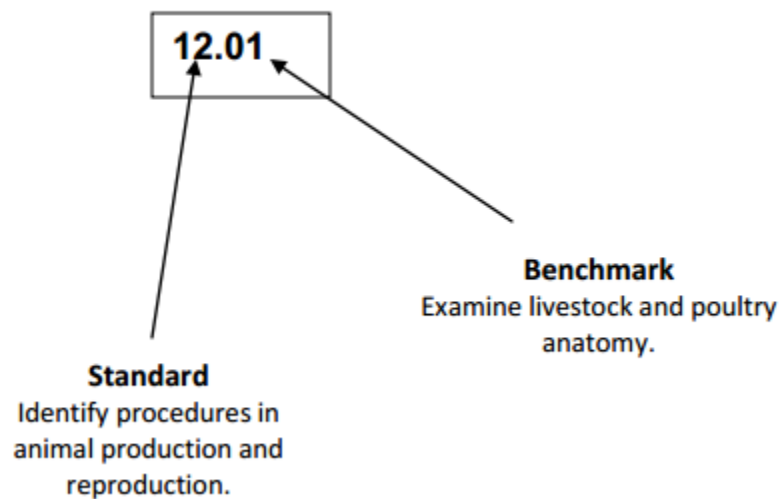
I. Guide to the Individual Benchmark Specifications

Content specific guidelines are given in the *Individual Benchmark Specifications* for each course. The *Specifications* contains specific information about the alignment of items with the Florida Standards. It identifies the manner in which each benchmark is assessed, provides content limits and stimulus attributes for each benchmark, and gives specific information about content, item types, and response attributes.

Benchmark Classification System

- Each Career and Technical Education course has its own set of course standards. The benchmarks are organized numerically, with two numbers separated by a decimal point. The first number is the standard number, and the second number is the benchmark number. You will see these numbers on the Item Specifications for each course.

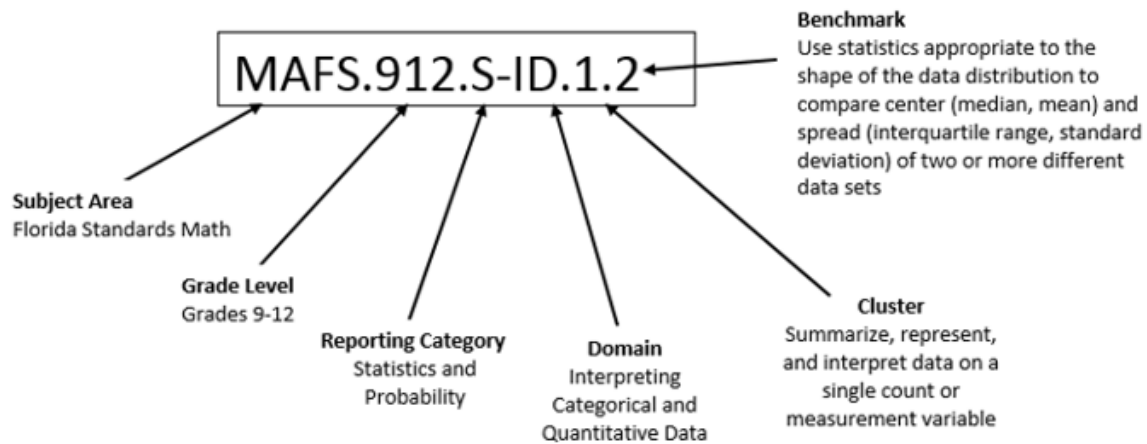
An example, from Agritechnology 1:



The image above describes the components of a Career and Technical Education Standard and Benchmark classification system.

Each MAFS benchmark is labeled with a system of letters and numbers.

- The four letters in the *first position* of the label identify the **Subject**.
- The number(s) in the *second position* represents the **Grade Level**.
- The letter(s) in the *third position* represents the **Category**.
- The number in the fourth position shows the **Domain**.
- The number in the *fifth position* identifies the **Cluster**.
- The number in the last position identifies the specific **Benchmark**.



The image above describes the components of a Florida Standard and Benchmark classification system.

Definitions of Benchmark Specifications

The *Individual Benchmark Specifications* provides standard-specific guidance for assessment item development for the Florida Department of Education Career and Technical Education item banks. For each benchmark assessed, the following information is provided.

Reporting Category	is a grouping of related benchmarks that can be used to summarize and report achievement.
Standard	refers to the standard statement presented in the Florida Standards.
Benchmark	refers to the benchmark statement presented in the Florida Standards. In some cases, two or more related benchmarks are grouped together because the assessment of one benchmark addresses another benchmark.
Item Types	are used to assess the benchmark or group of benchmark.
Cognitive Complexity	ideal level at which item should be assessed.
Benchmark Clarifications	explain how achievement of the benchmark will be demonstrated by students. In other words, the clarification statements explain what the student will do when responding to questions.
Content Limits	define the range of content knowledge and that should be assessed in the items for the benchmark.
Stimulus Attributes	define the types of stimulus materials that should be used in the items, including the appropriate use of graphic materials and item context or content.
Response Attributes	define the characteristics of the answers that a student must choose or provide.
Content Focus	addresses the broad key terms and concepts associated with the examples found in the standards, benchmarks, or benchmark clarifications.
Sample Items	are provided for each type of question assessed. The correct answer for all sample items is provided.

II. Individual Benchmark Specifications

Standard	29.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals--The student will be able to:
Benchmark	29.02 Create an electronic resume.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to understand what is contained in a resume and the elements of a well designed resume.
Content Focus	Resume, design elements, word processing skills
Content Limits	Items are limited to how to create an effective resume.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is the most serious résumé error? a. chronological order b. excessive length c. references d. using templates Correct answer: b

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.01 Produce designs integrating all elements of design.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to effectively use the design elements.
Content Focus	Line, color, shape, space, texture, typography, scale, emphasis, balance, harmony
Content Limits	Items are limited to how to combine the elements of design effectively.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: A good design contains elements that lead the reader through each element in order of its significance.Print newspapers rely on which element to catch the reader's attention? a. balance b. emphasis c. space d. texture Correct answer: b

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.02 Produce vector illustrations using digital software.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to identify and explain what vector drawings are and how to create them effectively.
Content Focus	Vector, export, import, uses, paths, control points, nodes, points, lines, curves, shapes, polygons, mathematical expressions
Content Limits	Items are limited to why vector graphics are used and how to design on industry software.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is not a common vector file extension? a. .ai b. .cdr c. .dxf d. .tiff Correct answer: d

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.03 Produce multiple projects using a variety of digital software.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to identify and use the best software for the project.
Content Focus	Problem-solving, purpose, outcome, alternatives, parameters
Content Limits	Items are limited to what software is the best suited to each task within a project.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: Your boss has asked for a recommendation for a new software program. The purpose is to track expenses. What type of software suites would you recommend? a. database suite b. graphics suite c. productivity suite d. project management suite Correct answer: c

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.04 Prepare output files using pre-press protocols (e.g., color separation, font management, file management, use of postscript fonts, etc.).
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to correctly save files for use in the printing process.
Content Focus	Color separation, font management, file management, use of postscript fonts, job roles, CMYK, RGB, XML, pre-lighting, transparency flattening, color separation, color management, trapping, screening
Content Limits	Items are limited to how to save and export files to maximize available printing options.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What function is not a step in a prepress workflow situation? a. imposition b. packaging c. PDF creation d. trapping Correct answer: b

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.05 Perform integrated functions using various design software applications.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to understand and explain how software suites work together.
Content Focus	Software suites, integrated software, software system
Content Limits	Items are limited to how applications from within a suite work together.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: Which software helps integrate a graphics suite software without leaving an suite application? a. ARTStation b. Mini Bridge c. Navigator d. Web Edit Correct answer: b

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.06 Create documents using advanced features in layout/paste-up software.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to create layouts and use templates.
Content Focus	Schematic symbol, footprint, part, database, design rule checking, component position report, design status report, forward/backward annotation
Content Limits	Items are limited to availability and functions of advanced features.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What are the faint blue, dashed lines that appear as you drag an object toward a drawn shape when the edges or center of the object are aligned? a. demote b. guides c. outline d. pane Correct answer: b

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.07 Produce multiple color designs using proper color balance for presentation.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to understand and design using color balance.
Content Focus	Color, color balance, presentation, intensity, flash, brightness, lighting
Content Limits	Items are limited to how to use color properly in design.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is the balance that has equal emphasis over entire 2-D surface so that there is always the same visual weight or attraction wherever you may look? a. crystallographic balance b. horizontal balance c. radial balance d. symmetrical balance Correct answer: a

Standard	30 Demonstrate proficiency in digital publishing operations--The student will be able to:
Benchmark	30.08 Create electronic presentations.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to create electronic demonstration.
Content Focus	Organize the information, select the right medium, gather information, analyze the situation, sort information, selecting the direct or indirect approach, outlining your content, developing an audience profile
Content Limits	Items are limited to components of an electronic presentations.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is the first two steps in creating an electronic presentation? a. analyze the situation and audience profile b. gather information and purpose c. purpose and developing an audience profile d. sort information and gather information Correct answer: c

Standard	31 Demonstrate proficiency in digital imaging--The student will be able to:
Benchmark	31.01 Produce projects using line art, grayscale, duotone, and four-color process.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to identify and explain the concepts of line art, grayscale, duotone and four -color process.
Content Focus	Line art, grayscale, duotone, and four-color process, additive and subtractive color theory, color perception, LAB, CMYK, HTML, HSL, RGB, spot vs. Process color,
Content Limits	Items are limited to design using line art, grayscale, duotone, and four-color process.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: When designing in duotones, the first step is changing your canvas to grayscale, then check the canvas to the ideal would be solid black, no white stripes, and near level skyline with highs at the far left and right. What adjustment would accomplish this? a. color mixer b. histogram c. hue d. selective color Correct answer: d

Standard	31 Demonstrate proficiency in digital imaging--The student will be able to:
Benchmark	31.02 Emphasize, interpret, and establish mood and emotion using illustrations.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to portray emotions using computer generated drawings.
Content Focus	Environment, coloring, lighting
Content Limits	Items are limited to elements that create different moods and emotion when designing.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: Which color scheme allows artists to avoid harsh contrasting color and mood? a. analogous b. complementary c. square d. triadic Correct answer: a

Standard	31 Demonstrate proficiency in digital imaging--The student will be able to:
Benchmark	31.03 Apply special effects to projects.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to apply special effects on digital projects.
Content Focus	Special effects, visual effects, environments, CGI, compositing, matte painting, animation, lighting, texture, rigging, simulation FX
Content Limits	Items are limited to how to use special effects on a variety of digital outputs.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What video effect is created using digital technology; based on the ability to alter an image by manipulating each individual pixel? a. Computer Generated Imagery (CGI) b. Digital Video Effect (DVE) c. Frame Based Animation (FBA) d. Frame by Frame (FBF) Correct answer: a

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.01 Create PDF files.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to understand what a PDF file is, its benefits and weaknesses, and how to create one from a variety of software.
Content Focus	ISO, file structure, security, benefits and weaknesses
Content Limits	Items are limited to how to save as a pdf in various software applications.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What technology is needed to convert a scanned PDF document into an editable format? a. Able2Extract b. Adobe Reader c. OCR d. word processing program Correct answer: c

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.02 Create links.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to create hyperlinks.
Content Focus	Hyperlinks, target, absolute and relative links, webpage, file, email
Content Limits	Items are limited to how to create links to different sources and using different targets.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is not a type of target for a hyperlink page? a. blank b. parent c. same d. top Correct answer: c

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.03 Optimize images for the Web (e.g., file size, transmission time).
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to understand the concept of image size for different applications.
Content Focus	File size, transmission time, file type, aspect ratio, buffer, compression, lossless, lossy, load time, raster, vector
Content Limits	Items are limited to the appropriate size and type of images to maximize usage.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: The goal of working with different formats is to compress your images so that they load quickly, without sacrificing quality. What would be the smallest format but best quality for line drawings, text, etc ? a. DMG b. JPG c. MPEG d. PNG-8 Correct answer: d

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.04 Build pages for media presentations and standards.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to understand the accepted rules of presentations.
Content Focus	Presentation, themes, animations
Content Limits	Items are limited to how to create presentations.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: You need to set your presentation to play automatically. What setting controls the amount of time a slide displays on the screen? a. advance slide timing b. mirror timing c. movie timing d. presenter timing Correct answer: d

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.05 Link media elements into Web-delivered documents.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to understand html code to insert links.
Content Focus	Html, code, css style sheets, tags, elements
Content Limits	Items are limited to how html works when creating hyperlinks.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is the purpose of an HTML link - ID Attribute? a. to define - default URL and target for all links b. how to write anchor with an id inside an html c. to define style information for an HTML document d. the target attribute specifies where to open the linked document. Correct answer: b

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.06 Create buttons.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to create buttons in a variety of multimedia products.
Content Focus	Buttons, navigation, hyperlink, css styles, table, spry,
Content Limits	Items are limited to how to create buttons for navigation in a number of different multimedia software.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: Creating graphic buttons to make hyperlinks on a webpage can be done in what software program? a. Adobe Acrobat b. Adobe InDesign c. Microsoft Access d. Microsoft Office Correct answer: b

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.07 Create dynamic media projects.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to identify what dynamic media is and be able to create a variety of products in various software programs.
Content Focus	Presentation software
Content Limits	Items are limited to how to create interactive projects.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is the the dynamic social media process of employing users to participate in product design or product redesign? a. crowdsourcing b. folksonomy c. vertical media d. viral media Correct answer: a

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.08 Create presentations using color effects.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to understand color theory and its effects in multimedia presentations.
Content Focus	Color theory, color effects, color meanings
Content Limits	Items are limited to the psychological effects of color in presentations.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What is the presentation template that has 12 complimentary colors used for backgrounds, text, buttons, etc. called? a. color format b. color saturation c. color scheme d. theme color Correct answer: c

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.09 Select appropriate fonts for on-screen presentations.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Medium
Benchmark Clarification	The student will be able to identify the most effective fonts and sizes for presentations.
Content Focus	Font, presentations, serif, sans-serif, script, title font, body font, bold, underline, italic, shadow, all caps, word art, highlighting, bullet points, bullet character, bullet size, bullet spacing
Content Limits	Items are limited to how to create appropriate presentations for on-screen application.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: Of the two types of fonts in the theme font, the type that is applied to all slide text except titles is called? a. background font b. body font c. emphasis font d. series font Correct answer: b

Standard	32 Demonstrate proficiency in multimedia presentation--The student will be able to:
Benchmark	32.10 Generate presentations with fully integrated text and images.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Medium, High
Benchmark Clarification	The student will be able to create presentations with images that best match the text.
Content Focus	Enhancing text, presentation, connections, integrate photos, video, social media
Content Limits	Items are limited to how to create presentations that is fully integrated and perceived as one medium.
Stimulus Attributes	Worksheets, observations, hands on assignments, examples and non examples, simulations, role playing
Response Attributes	None Specified
Sample Item	Multiple Choice: What type of multimedia presentation includes different types of software applications into the final product? a. animation presentation b. fully integrated presentation c. movie presentations d. Prezi presentations Correct answer: b